SUBJECTS AND THE $\theta$-CRITERION*

0. Introduction: Subjects

As is well-known, there are a number of specific semantic roles potentially available to the subject of a sentence. Some of these are illustrated in the following examples:

(1)a. John attacked Bill. [agent]
    b. Mary enjoyed the movie. [experiencer]
    i. Susan received the package. [goal?]
    d. The skeleton key opened the door. [instrument]

As is also well-known, though the by-phrase in a passive construction is often imprecisely referred to as an ‘agent phrase’, such a phrase can, in fact, have just the range of semantic roles available to a subject. Example (2) illustrates the same possibilities for by-phrases that were exhibited by subjects in (1):

(2)a. Bill was attacked by John.
    b. The movie was enjoyed by Mary.
    c. The package was received by Susan.
    d. The door was opened by the skeleton key.

The instrument role exhibited in (1d) and (2d) can also be realized as a with-phrase:

(3)a. John opened the door with the skeleton key.
    b. The door was opened with the skeleton key by John.

Note that at least two of the roles available to subjects – agent and instrument – are both realized in (3), though in different syntactic ways.

Thus far, we have seen two different ways in which the agent role can be realized ((1a) and (2a)), and three different ways in which the

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instrument role can be realized ((1d), (2d) and (3)). Further, we have seen that these two roles can co-occur. There are, however, certain restrictions on their co-occurrence, as shown in (4).

(4)a. *John opened the door by the skeleton key.
   b. *The skeleton key opened the door by John.

On the face of it, this is rather surprising. The examples in (3) show that open allows both agent and instrument, and allows them simultaneously. Example (3a) shows that agent can be realized as a subject, and (2d) shows that instrument can be realized as a by-phrase. Thus, it is not immediately obvious what is violated in (4a). Similarly, since instrument can be realized as a subject, as in (1d), and agent can be realized as a by-phrase, as in (3b), (4b) would be expected to be grammatical. It might be thought that what is going on is that the object of by can only receive a THEMATIC ROLE (θ-role) by transmission from the passive affix, as in Jaeggli (1986). If this were so, (4a) and (4b) would be excluded in a straightforward way by the θ-criterion of Chomsky (1981, p. 36), stated in (5) below. In both examples, an argument, the object of by, would lack a θ-role. But I will show below that the paradigm in (1)–(4) carries over with perfect congruence to nominals. Yet in nominals, even well-formed ones, there is no passive affix to transmit the subject role to the object of by. Thus, an account like Jaeggli’s would be insufficiently general.

The phenomenon in (4) seems quite reminiscent of the θ-criterion. Thus, it is tempting to appeal to that principle. But evidently some extension will be required, since each argument in (4a) and in (4b) does seem to have an independent thematic role, as demanded by (5).

(5)  θ-criterion:
    Each argument bears one and only one θ-role, and each
    θ-role is assigned to one and only one argument.

1. The θ-Criterion Extended

The following constitutes a preliminary outline of a possible extension of the θ-criterion. First, to capture the central property of by-phrases, I propose that the by-phrase is assigned the role of subject (or, alternatively, that by transmits this role to its complement). ¹ I take this to be

¹ There is one potential problem that should be noted with respect to assignment of the subject role by by. Given that (i) is possible, apparently with by assigning the subject role